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 781 ccggcatcgt aatctacgca ccggccctca tcctgaacca agtgaccggg ctggacatct
 841 gggcgtcgct cctgtccacc ggaattatct gcaccttcta cagggctgtg ggcggcatga
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Figure 1

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MEAVETGERPTFGAWDYGVFALMLLVSTGIGLWVGLARGGQRSA
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VLTIAQNHSRINLMDENPDPRSRYTFWTFVGGTLVWLSMYGVNQAVQRYVACRTEK
QAKLALLINQVGLFLIVSSAACCGIVMFVFYTDGTLGRIISAPDQYMPLLVLDIFE
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IYGSACLTVAALSSLLGGVLOGSFTVMGVI SGPLLGAFLGMFLPACNTPGVLAGLG
AGLALSLWVALGATLYPPSEQTMRVLPSSAARCVASGLLDPALIPANDSSRAP
SSGMDASRPALADSFYAI SYLYYGALGTLTTVLCGALISCLTGPTKRSTLAPGLLWWD
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Human Sodium/Iodide Symporter

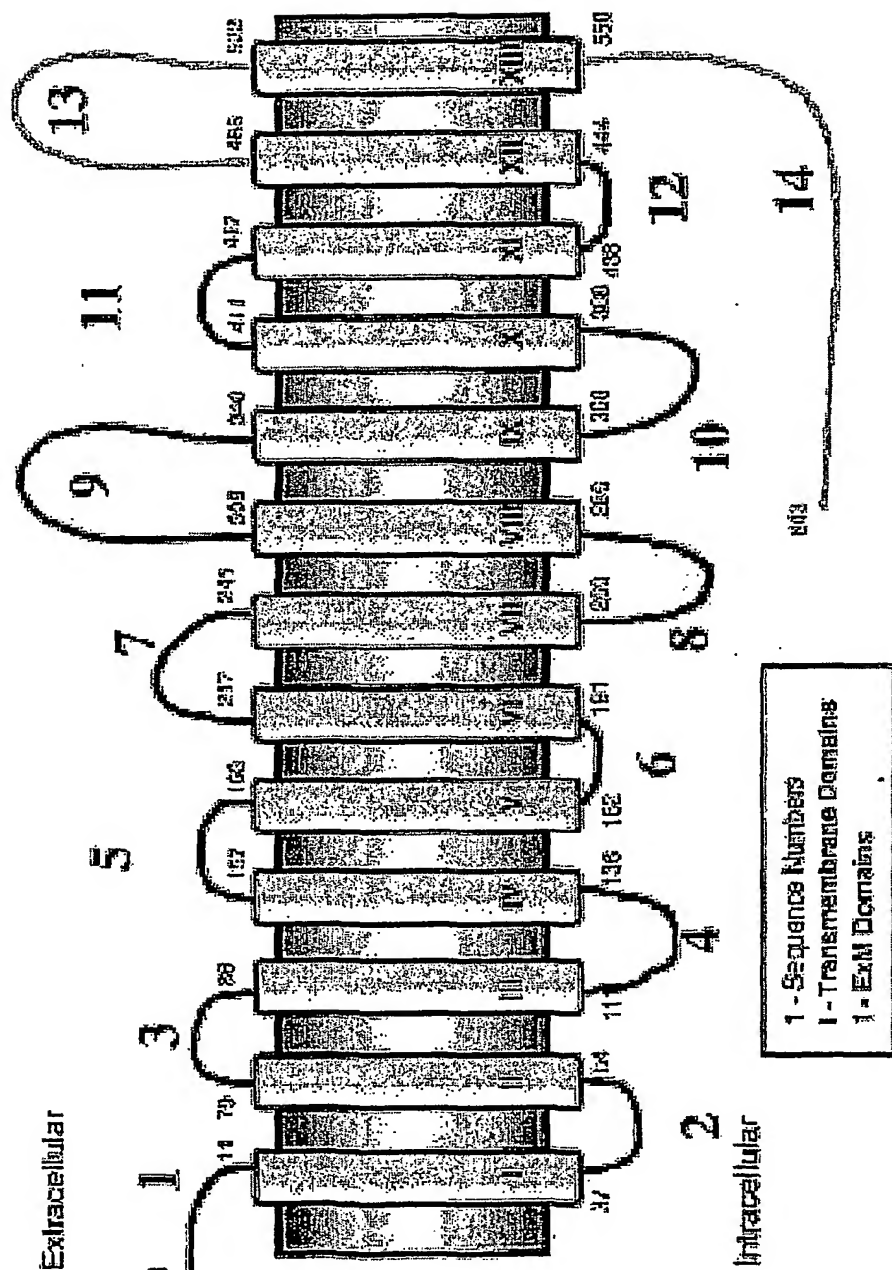


Figure 3

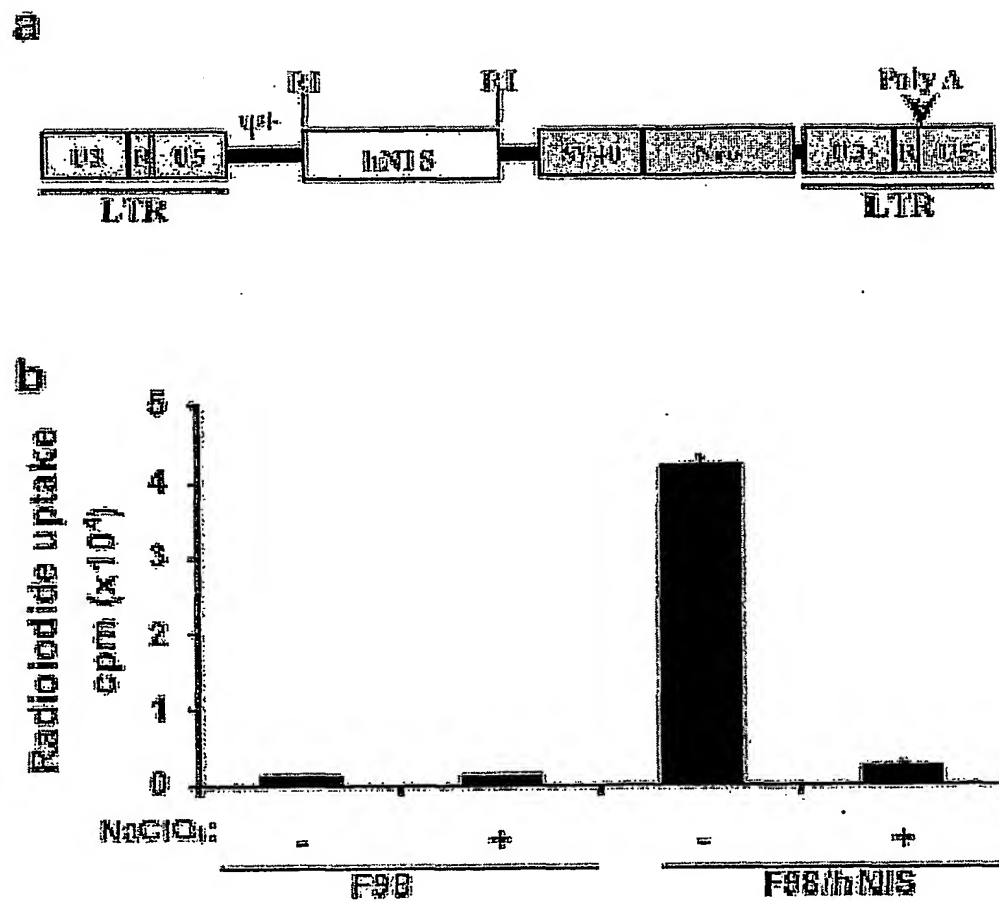


Figure 4

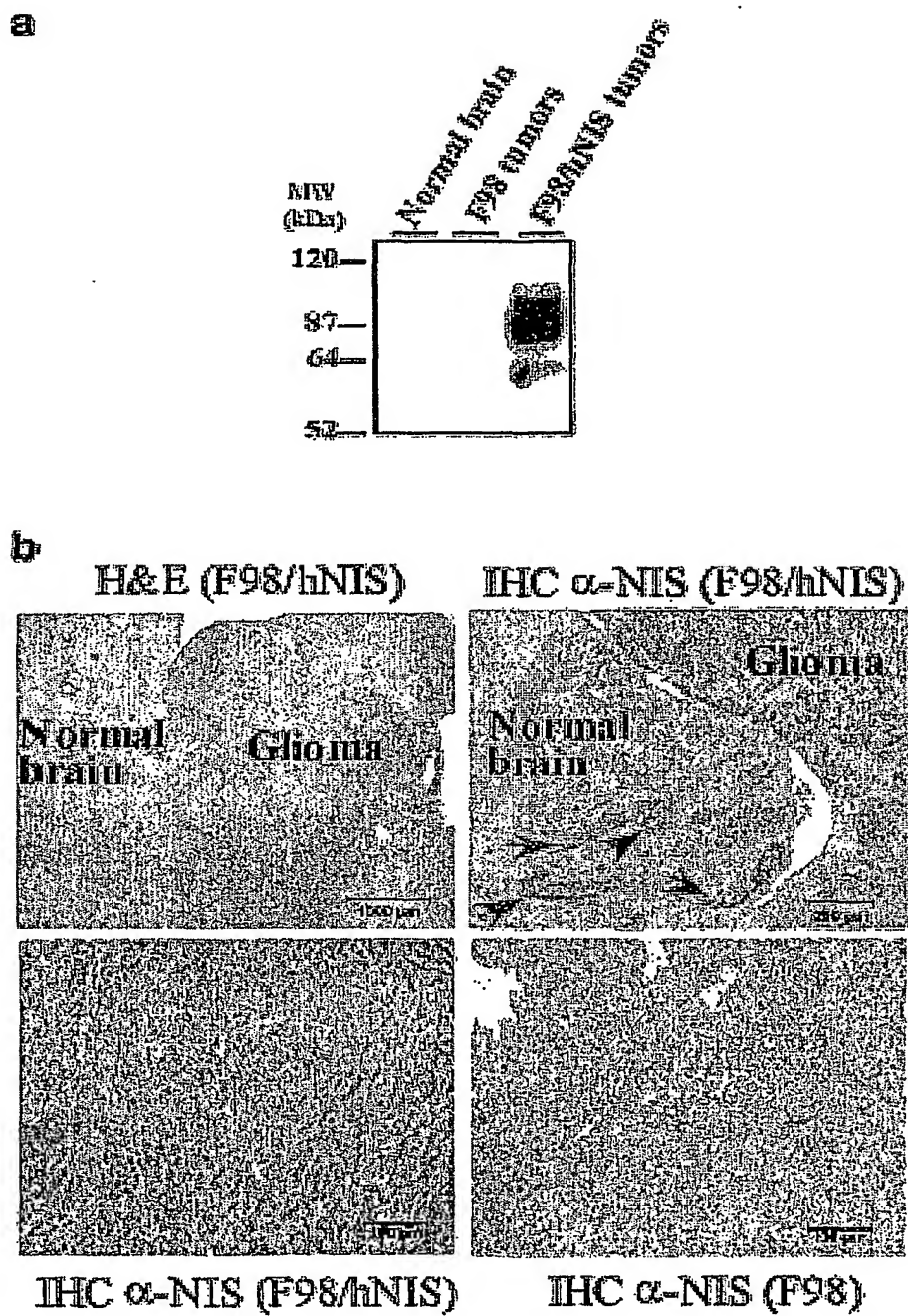


Figure 5

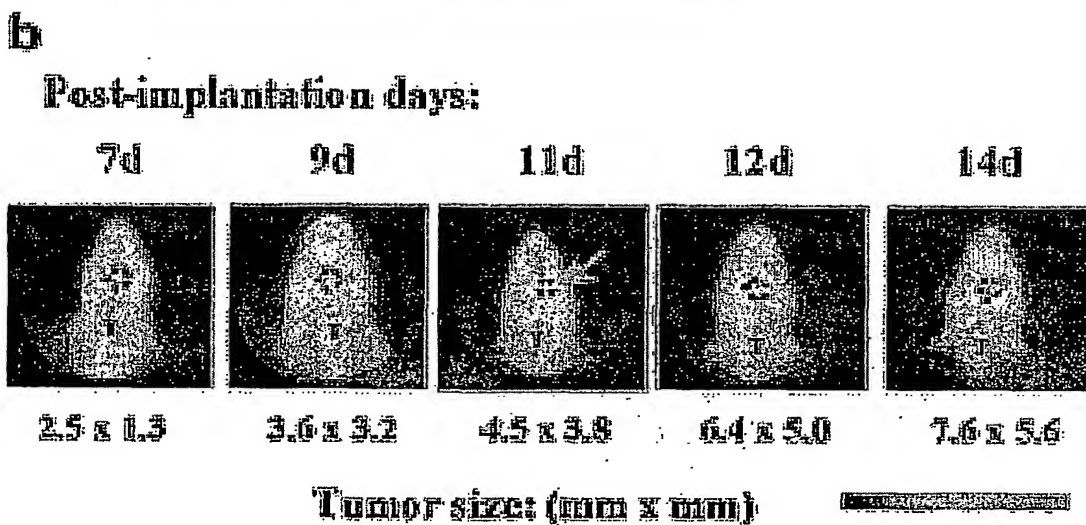
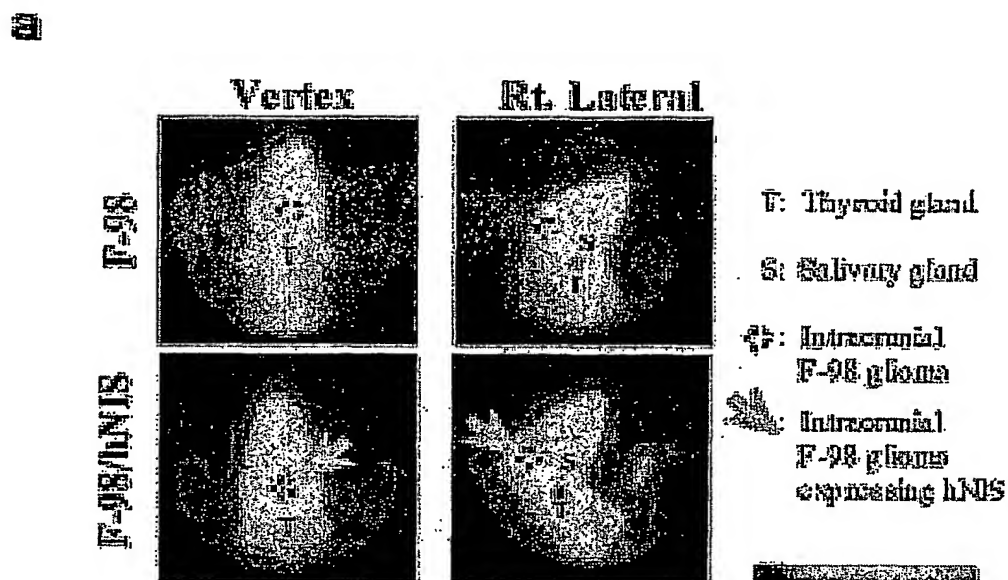


Figure 6

aPost-injection : 5 min
of I-123

1 hr

4 hr

24 hr

37 hr

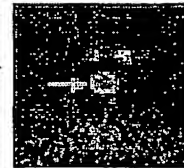
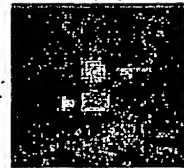
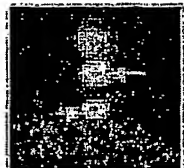
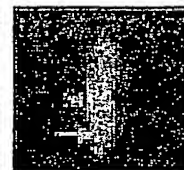
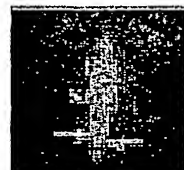
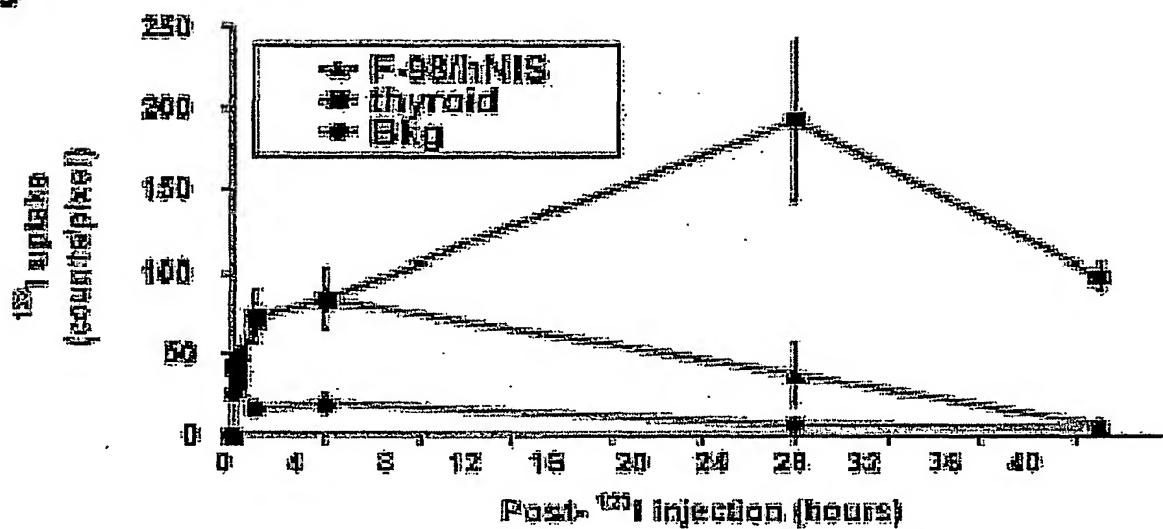
Pinhole
(Vertex)Planar
(Ventral)**b**

Figure 7

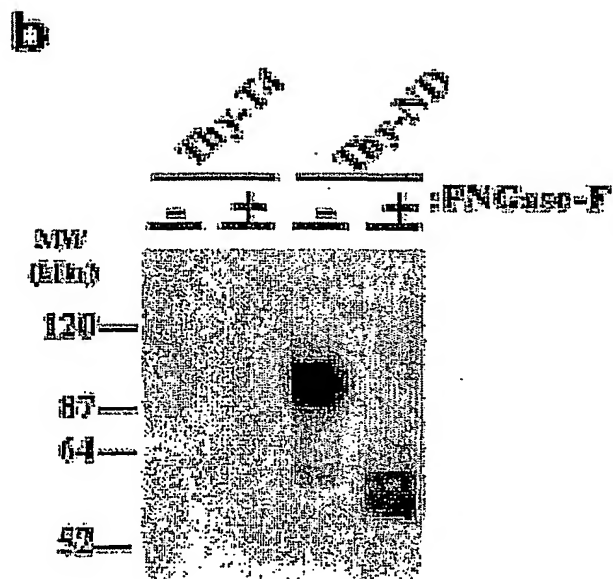
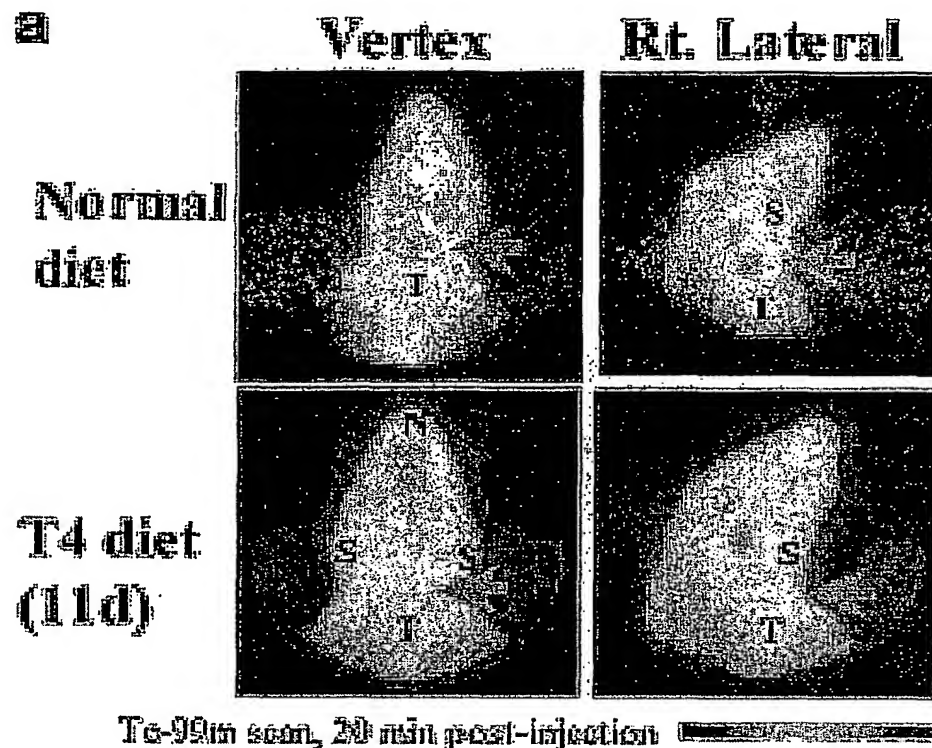


Figure 8

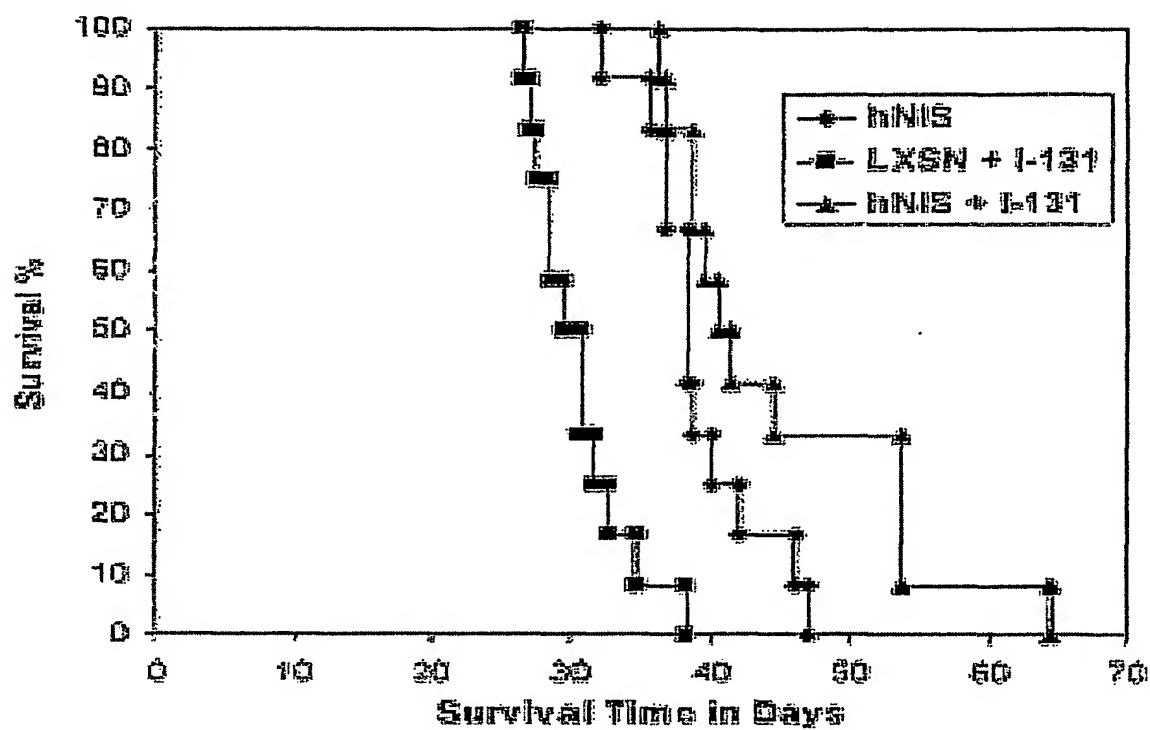
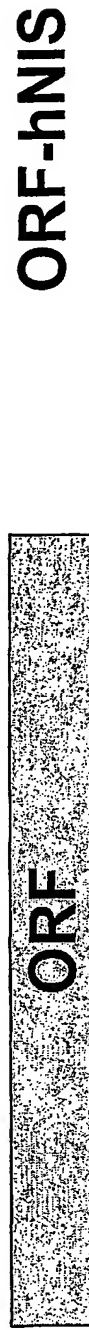


Figure 9

ORF-hNIS & ORF-hNIS-(lys)₁₀

WO 2004/000236



PCT/US2003/020111

10/519183

NTR: non-translated region
ORF: open reading frame

Figure 10

PCR Cloning of ORF-hNIS & ORF-hNIS-(lys)₁₀

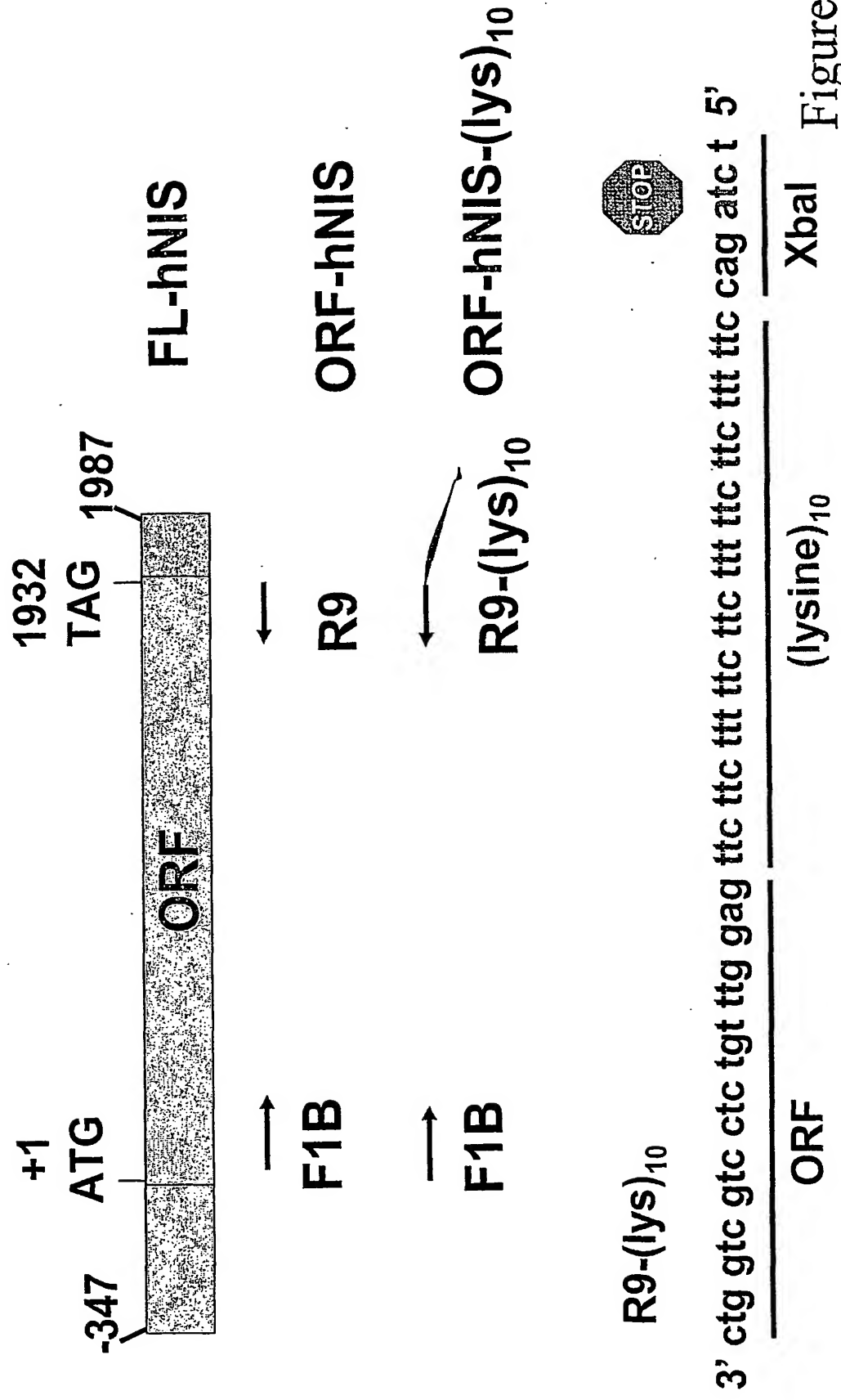


Figure 11

ORF-hNIS-(Lys)₁₀ has 3 fold increase of RAIU activity than ORF-hNIS

WO 2004/000236

PCT/US2003/020111

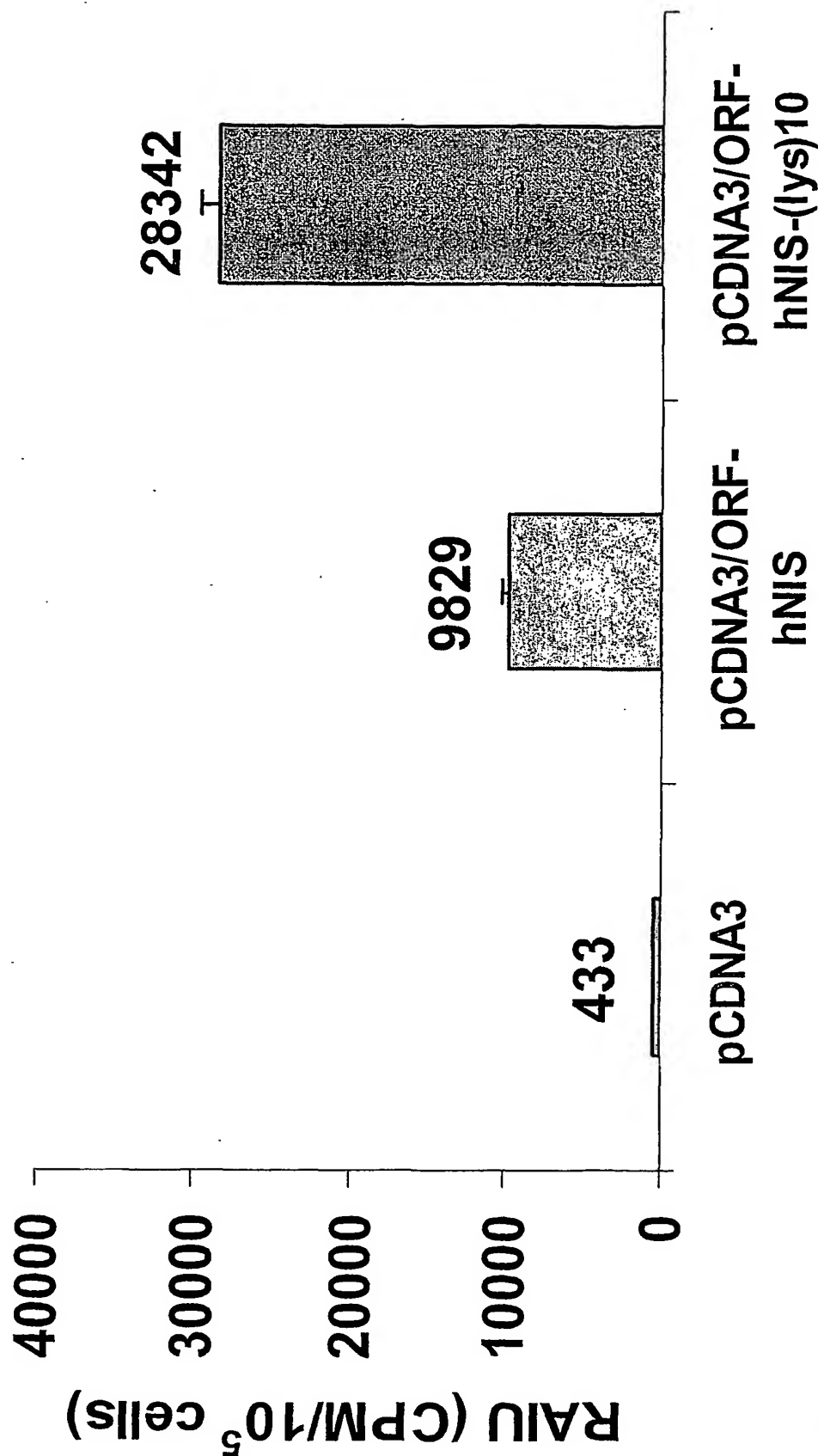


Figure 12

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